HOW TO CREATE ACCESSIBLE ADOBE PDF FILES

SOFTWARE REQUIRED:

Adobe Acrobat 5.0
Make Accessible Plug-In for Acrobat 5.0

The Make Accessible Plug-In is available as a free download on the Adobe Web site at:
http://www.adobe.com/support/downloads/detail.jsp?hexID=88de or http://www.adobe.com/products/acrobat/access_downloads.html
Follow Adobe's instructions on how to download and install the plug-in.

HARDWARE REQUIRED:

Only Acrobat 5.0 on a Windows platform, which supports the Microsoft Active Accessibility (MSAA) Application Programming Interface (API), can create a 508-compliant PDF file. **The Macintosh operating system is incapable of creating 508-compliant PDF files.**

NOTE:

Acrobat 5.0 and the Make Accessible Plug-In supports documents published in Microsoft Word, Adobe InDesign, and FrameMaker. Numerous errors occur with Fact Sheets designed in Adobe Illustrator, because the entire layout is viewed as a graphic rather than text. Assistive technologies such as screen readers cannot read graphics or other illustrations, but rather require structured text.

REFERENCES:

How to Create Accessible Adobe PDF Files: Available at
   http://www.adobe.com/products/acrobat/pdfs/access_booklet.html

Advanced Techniques for Creating Accessible Adobe PDF Files: Available at
   http://www.adobe.com/products/acrobat/pdfs/CreateAccessibleAdvanced.pdf

PROCEDURE:

1. Convert original document to a PDF file using Acrobat 5.0 and Acrobat Distiller. This step can be accomplished on either a Macintosh or PC.

2. On a Windows platform, which has the Make Accessible Plug-In downloaded, open PDF document in Acrobat 5.0.

3. On the main menu, go to Window > Tags. Drag the Tags palette into the Navigational palette. The Navigational palette is home to Bookmarks and Thumbnails. Click the Tags palette. "No Tags Available" will appear.

4. From the Acrobat main menu select Document > Make Accessible. Notice in the Tags palette that "No Tags Available" will change to "Tags Root." Clicking on the "+" sign next to Tags Root will display the tags created by the Make Accessible Plug-In. The tags are what defines the original PDF file as a "tagged" or "structured" PDF file. **NOTE:** If the Make Accessible Plug-In has not been loaded properly, no "Make Accessible" will appear when Document has been selected.

5. In the main menu, choose Tools > Accessibility Checker.

6. In the "Accessibility Checker Options" text box, uncheck "Create Logfile" and check "Create Comments in Document." Click OK. This step will display any errors in the PDF file.

7. If the Accessibility Checker finds any problem areas, it will display a dialog box explaining what they are. Click OK. **NOTE:** Be mindful that each PDF file will have its own unique set of problem areas. These procedures explain how to correct only the most common errors (i.e., graphics, geologic symbols, and language specifications).

8. Paging through the PDF document will reveal problem areas, either by outlining in red or revealing a small, red text box. Keeping in mind where some of the errors have occurred, go to the main menu and select Tools > Comments > Delete All. A Comments dialog box will appear indicated how many comments were deleted. Click OK. **NOTE:** If the comments are not deleted, when Tools > Accessibility Checker is used again if will add another set of errors onto the first set of errors.

9. On the Acrobat main menu, go to the **"stencil or outlined"** **T** tool (TouchUp Text Tool) and click on the arrow which indicates "More Tools." Select the TouchUp Object Tool.

10. Using the TouchUp Object Tool, draw a box around the first graphic including the figure caption. In the Tags palette, select Tags in the upper right corner. Select "Find Element From Selection". The Tags Root in the Tags palette will expand, displaying which tag is associated with this graphic. Tags are displayed as "Parent" tags with "Child" tags indented beneath the Parent tag. Click on the "Parent Tag". With the parent tag selected, click on Tags in the upper right corner of the Tags palette. Select "Element Properties." The "Element Properties" dialog box will appear. In the block marked "Alternate Text", type in the figure caption for this graphic. Click OK.

11. Test PDF document again for errors by selecting from the main menu Tools > Accessibility Checker. If errors remain on the same graphic, this indicates that not all of the Parent tags associated with that particular graphic had the "Alternate Text" box completed. It is imperative that all these tags are completed. On the main menu, again select Tools > Comments > Delete All.

12. In the Tags palette, click on Tags in the upper right corner, and select "Turn On Associated Content Highlighting." Select a tag in the Tags palette. Acrobat will "pop" you to the item in the document that is associated with that tag. Find all the Parent tags associated with the graphic by testing the tags in the general area of the first Parent tag that has been identified for the particular graphic. Once all the Parent tags have been identified, go the Tags in the upper right corner and "Turn Off Associated Content Highlighting." With the TouchUp Object Tool from the main menu, again draw a box around the graphic including its figure caption. For each Parent tag associated with the graphic, select it, and click on Tags in the upper right corner selecting "Element Properties." In the "Element Properties" dialog box, type the figure caption in the Alternate Text box and click OK. Do this process for all the Parent tags associated with this graphic.

13. Test the PDF document again for errors by selecting from the main menu Tools > Accessibility Checker. If any further errors are indicated on the same graphic as above, repeat step 12. When a graphic or illustration passes this test, no further red outlined areas will appear on it. Continue paging through PDF document, fixing all the errors by using the steps indicated above.

14. When you have completed the entire PDF document, test once again by selecting Tools >Accessibility Checker. When the Accessibility Checker dialog box indicates "The Checker Found No Problems In This Document," the PDF file is then considered to be accessible and compliant under Section 508. Save your file.

15. It is not necessary to test your file by using a screen reader, provided the Accessibility Checker indicated no errors present. If you wish to test your file for accessibility with screen readers, GW Micro's Window-Eyes (http://www.gwmicro.com/) has a demo version on their website. You can also use Freedom Scientific's JAWS for Windows (http://www.freedomsci.com/). **NOTE:** Check the web sites for system requirements.

FURTHER SUGGESTIONS:

1. In the main menu of Acrobat, the T (Text Select Tool) can be used to copy and paste the figure captions into the Alternate Text box of Element Properties in Tags.

2. If any geologic symbols are used in the PDF document, the Make Accessible Plug-In cannot recognize them because they are not Unicode. When checking the document for accessibility, complete the following step. From the main menu select Tools > Accessibility Checker. In the "Check for" portion of the dialog box, uncheck "Reliable character encodings." Click OK and continue as listed above.

3. If any language specification problems should occur, they will be highlighted in yellow. To correct this problem, do the following: In the Tags palette, click on Tags in the upper right corner. Select "Element Properties." In the Language box, using the draw down arrow, select EN-US. Click OK and test for accessibility.

4. These guidelines should be used for bulletins, professional papers, open-file reports, etc. They were not meant to be used for making maps 508 compliant. Please contact CPG with questions on maps.